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## Trinidad and Tobago Dry/Wet Spell Monitor and Outlook by End of November 2017

### Wet Spell Concern Heightens By End of November

#### 3-Month Outlook (short-term):

- ❖ The Dry Spell Outlook for the three-month period ending November 2017 shows no concern for impactful dryness in Trinidad and the little to no concern for impactful dryness in Tobago (see Figure 1).
- ❖ The outlook indicates a trend towards enhanced wetness concerns for large areas of Trinidad and Tobago with the trend being largest in Trinidad where positive Standardized Precipitation Indices (SPIs) are highest. Parts of southern Trinidad and most of Tobago have borderline negative SPIs.
- ❖ Rainfall surpluses during June, July and August in Trinidad and June and August in Tobago along with anticipated surplus rainfall amounts during the three months ending November 2017 are likely to ease previous anticipated long-term dryness in both islands. As such, there is no expectation of short-term dry-spell or drought conditions developing for Trinidad and Tobago by the end of November (see figure 1).
- ❖ The confidence in the trend towards positive SPIs in Trinidad is boosted by the existence of very slight (1- 11% in both islands) chance for excessive dryness (i.e. SPIs values less than -1.5) as indicated by below normal probabilities (see figure 2).

#### Standardized Precipitation Index

The Standardized Precipitation Index (SPI) is used by Trinidad and Tobago Meteorological Service (TTMS) to monitor and estimate dryness and wetness on different timescales. It is a measure of relative dryness and wetness compared to the long term average rainfall for a particular timescale. A negative SPI reflects a rainfall shortfall and hence relative dryness. In general, dryness impacts are expected when the value of the 3-month SPI lies near -1.0. As the SPI value becomes less than -1.0, the severity of impacts increases. For Trinidad and Tobago, extreme or unusual dryness is taken to occur when negative SPIs is lower than -1.25 in the dry season and near -1.5 in the wet season. Negative SPIs are used to characterise the severity of the dryness and as such, dry spells and drought categories. A positive SPI reflects a rainfall surplus and hence relative wetness.

Figure 1

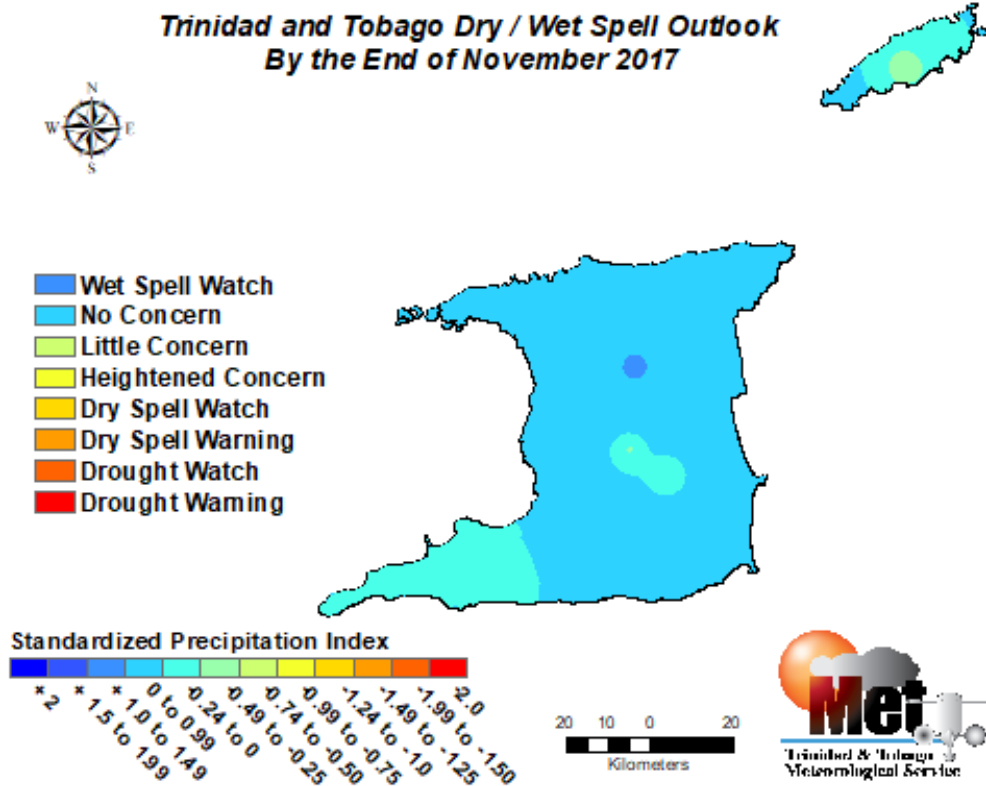
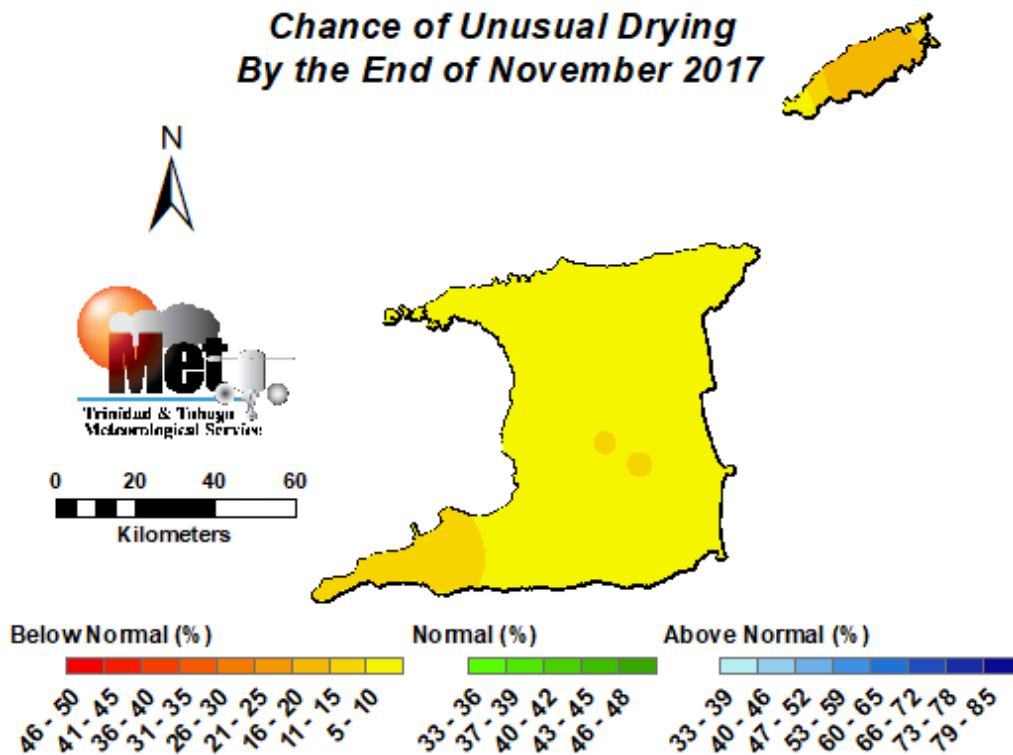


Figure 2



**Longer-term (12-Month) Dryness Assessment:**

- ❖ When the rainfall is characterised as SPIs, the longer-term (12-month) dryness assessment for the period September 2016 to August 2017 shows that concerns for long-term deficit rainfall have been identified in the north-central and southern parts of Trinidad.

